

ORIGINAL ARTICLE

Analysis of Heavy Metals in Honey from North-Western Regions of Iran

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ABSTRACT: In the present study, the concentrations of three heavy metals including lead (Pb), zinc (Zn) and arsenic (As) in 72 different honey samples collected from North-Western regions of Iran were investigated using atomic absorption spectroscopy method. All metals were detected in 88.88% of the honey samples. The range of metals contamination in honey samples was 0.01 to 11.09 ppm. Zn was the most abundant metal, with an average concentration of 4.41 ± 2.4 ppm. The mean levels of Pb (0.12 ppm) and Zn (6.84 ppm) in honey samples of East Azerbaijan Province was significantly higher than average level of these metals in honeys from other provinces. Based on the results of this study and compared with recommended daily intakes, the heavy metal content of honey samples was not harm and is unlikely to cause any intoxication following honey consumption.